More frequent extreme events will shock the global food system

12 February 2016 - 'Food shocks' have the potential to wreak havoc on food markets, commodity exports, and families around the world.

The Met Office has joined a panel of British and American researchers at the annual meeting of the American Association for the Advancement of Science (AAAS) in Washington DC to present updated research revealing how extreme events, which affect the food system, are increasingly likely to occur and result in 'food shocks'.

Food shocks have the potential to impact food markets, commodity exports, and families around the world. For example, what if severe drought in the U.S. Midwest drives down the soy and maize harvest at the same time that a record-breaking heat wave in Europe bakes the continent's wheat crop?

An independent expert taskforce from the UK and USA outlined key recommendations to safeguard against threats to food supplies in a report last year.

At the AAAS, researchers will discuss the impact of new research and outline the prognosis for 2016.

Met Office Applied Climate Science Team Leader, Kirsty Lewis, is explaining:

· How our understanding of the geography of food production interacts with meteorology to compound the threats to food production in certain areas.

· Seasonal forecasts and the potential for weather driven food shocks in 2016.

Joshua W. Elliott, Computation Institute, University of Chicago , will present:

· New research findings from ground breaking projects to map the effects of climate change on crops around the world.

· Evidence for increasing risk to global agriculture from larger and more frequent extreme events as climate changes.

· New work on the risks posed by a 21st century Dust bowl-like drought to key commodity crops in the US Midwest and central plains.

Professor Tim Benton, Champion of the UK's Global Food Security Programme - which coordinated the task force's report will discuss the recommendations and the ways in which we can develop resilience against the increasing likelihood of food shocks.

"The global interconnectedness that makes countries more resilient to local production shocks makes them more vulnerable to shocks in distant 'breadbasket' regions. Crop yields and climate data show us that the global food system is at increased risk as extreme weather events are as much as three times more likely to happen as a result of climate change by mid-century".

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